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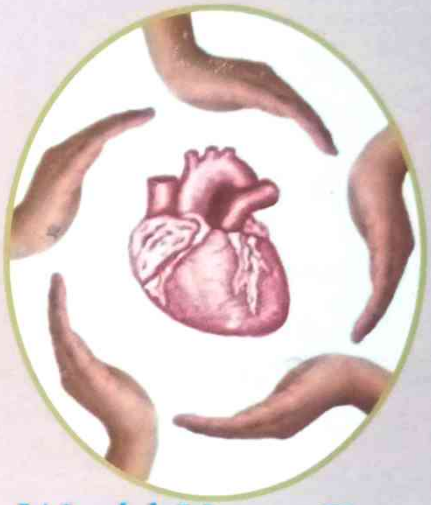
"HARDWORK DISCIPLINE SERVICE TRIUMPH"

LOVE FOR CARE

World Breastfeeding Week



World Heart Day

World Alzheimer's Day

Effectiveness of health education programme on knowledge regarding cardio pulmonary resuscitation among 2nd year B.Sc. Nursing students

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ABSTRACT:

Background: Heart disease is the world's largest killer diseases, 17.5 million deaths every year. About every 29 seconds an Indian dies of heart problem. As many as 20,000 new heart patients develop every day. In India 9 crore Indian suffer from heart disease and 30% more are at high risk. Sudden cardiac arrest is a major public health problem. Basic Life Support (BLS) is the provision of treatment designed to maintain adequate circulation and ventilation to the patient with cardiac arrest, without the use of drugs or special equipment. Basic Life Support (BLS) includes recognition of signs of sudden cardiac arrest (SCA), heart attack, stroke, and foreign-body airway obstruction (FBAO);. **Aim:** The present study was aimed to assess the effectiveness of health education programme on knowledge regarding cardio pulmonary resuscitation among 2nd year B.Sc. Nursing students of Narayana College of Nursing, Nellore. **Methodology:** Quantitative research approach was adopted for the present study. The samples were selected using Non-Probability convenience sampling technique, 50 2nd year B.Sc. Nursing students were selected for the present study. Data was collected with the help of structured questionnaire. **Results:** Collected data was analyzed by using descriptive and inferential statistics. There is no significant association between the level of knowledge and socio demographic variables of 2nd Year BSc(N) Students. **Conclusion:** The study concluded that majority of the students had B grade regarding Cardiopulmonary resuscitation. The study indicates that there is no need to educate the students regarding Cardiopulmonary resuscitation and to improve the knowledge. But ther is a need to improve the skills. **KEYWORDS:** cardio pulmonary resuscitation basic life support, heart attack, nursing.

Introduction:

Cardio-pulmonary resuscitation (CPR) is an emergency life saving measure; this is the combination of rescue breathing and chest compressions. It is performed among clients with the respiratory and cardiac arrest. And also near drowning, asphyxiation and traumatic clients. CPR conducts defibrillation, supports heart pumping for short duration, and allows oxygen to reach brain. It is more effective if perform as early as possible.

CPR involves chest compressions at least 5 cm deep and at a rate of at least 100 per minute in an effort to create artificial circulation by manually pumping blood through heart. In addition, the rescuer may provide breaths by either exhaling into the subject's mouth or nose or utilizing a device that pushes air into the subject's lungs. This process of externally providing ventilation is termed artificial respiration. CPR is only effective if commenced within 6 minutes after the blood flow stops, because permanent brain cell damage occurs when fresh blood infuses the cells after that time, since the cells of the brain become dormant as early as 4 - 6 minutes in an oxygen deprived environment and the cells are unable to survive the reintroduction of oxygen in a traditional resuscitation. Research using cardioplegic blood infusion resulted in a 79.4% survival rate with cardiac arrest intervals of 72 ± 43 minutes; traditional methods achieve a 15% survival rate in this scenario, by comparison. New research is currently needed to determine what role CPR, electric shock, and new advanced gradual resuscitation techniques will have with this new knowledge.

Modern CPR developed in the late 1950s and early 1960s. The discoverers of mouth-to mouth ventilation were Drs. James Elam and Peter Safar. Though mouth-to-mouth resuscitation was described in the Bible (mostly performed by midwives to resuscitate newborns) it fell out of practice until it was rediscovered in the 1950s. In early 1960 Drs. Kouwenhoven, Knickerbocker, and Jude discovered the benefit of chest compression to achieve a small amount of artificial circulation. Later in 1960, mouth-to-mouth and chest compression were combined to form CPR similar to the way it is practiced today.

NEED FOR THE STUDY

Cardiopulmonary resuscitation has grown from an obscure medical theory to a basic first aid skill taught to adults and is now the near-universal technique used in CPR instruction.

According to statistics nearly 7.5 lakh people die of sudden cardiac arrests every year in India. On an average, a victim begins to suffer irreversible brain damage four minutes after the cardiac arrest takes place when no CPR administered. For every minute that a cardiac arrest victim does not receive CPR, chances of survival drops by 10 percent. An effective CPR from a bystander can double a victim's chances of surviving with cardiac arrest. Recently in Bhopal former Indian first class cricketer Raja Ali needed Cardio Pulmonary Resuscitation to have a chance at survival but many in India not trained about of basic life-saving techniques, no one could come to his aid. Even though Policemen rushed him to the hospital after discovered him lying unconscious, the former cricketer was declared brought dead. While several

countries across the world are training the common man - in schools, colleges and work places about chest compressions or CPR to save sudden cardiac victims from dying, the World Heart Federation (WHF) says less than one percent Indians would presently know how to carry out a CPR.

OBJECTIVES:

1. To assess the knowledge of nursing students regarding Cardio Pulmonary Resuscitation.
2. To find the association between level of knowledge on Cardio Pulmonary Resuscitation with their selected socio demographic variables.

MATERIAL AND METHODS:

Research Approach: Quantitative research approach.

Research design: Descriptive design.

Setting: The study was conducted among 2nd Year B.Sc. Nursing students at Narayana College of Nursing, Nellore.

Population: In this study population consist of students who are studying in 2nd Year B.Sc. Nursing.

Sampling Techniques: Non probability convenience technique was used for the selection of sample.

Sample Size: 50 samples was selected for the study.

Inclusion Criteria:

The study includes nursing students, who are,

- Studying 2nd year B.Sc.
- Willing to participate in the study.
- Available or present at the time of data collection.
- Able to understand English.
- **Exclusion Criteria:** Students who are not studying in 2nd Year B.Sc. nursing.
- Students who are not willing to participate.
- Students who are absent at the time of study.

DATA COLLECTION TECHNIQUES AND INSTRUMENTS:

Description of tool:

Based on the review of literature the following tool were developed:

PART - A: It deals with demographic variables.

PART - B: It deals with structured questionnaire to determine the level of knowledge regarding CPR among II year B.Sc Nursing students. It consist of 30 multiple choice questionnaire. The correct answer scored 1 mark and wrong answer scored zero.

RESULTS:

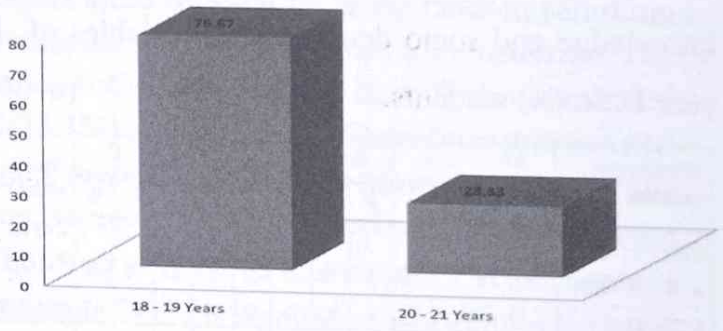

Fig No-1: Percentage distribution of nursing students based on age.

Table No-1:Frequency and percentage distribution of students based on level of knowledge regarding CPR.

(n=30)

Age in Years	Frequency (f)	Percentage (%)
A+	1	3.3
A	2	6.7
B+	4	13.3
B	9	30
C	6	20
D	8	26.7
Total	30	100

Table No - 1: Shows that with regard to level of knowledge regarding CPR, 1(3.3%) student had A+grade, 2(6.7%) students scored A grade, 4(13.3%) awarded B+grade, 9(30%) had B grade, 6(20%) had C and 8 (26.7%) have D grade.

Table No - 2: ***Mean and Standard deviation of level of knowledge CPR among II year B.Sc (N) students.***

(n=30)

Sample	Mean	Standard deviation
Students	24.2	6.22

Table No-2: Shows that mean knowledge score is 24.2 and standard deviation is 6.22.

Table No-3: Association between the level of knowledge and socio demographic variables of II year B.Sc (N) students. (n=30)

Demographic variables	A+		A		B+		B		C		D		Chi squire X^2
	F	%	F	%	F	%	F	%	F	%	F	%	
Age													C=3.75
a. 18 - 19 Years	1	3.4	1	3.3	3	10	6	20	6	20	6	20	T=11.07
b. 20 - 21	-	-	1	3.3	1	3.3	3	10	-	-	2	6.7	df=5; NS*
													P=0.05

Table N0 - 3: Shows that there is no significant relationship between the level of knowledge and age of 2nd years B.Sc (N) students.

CONCLUSION:

The findings of the study concluded that majority of the students had B grade regarding Cardio pulmonary resuscitation. The study indicates that there is on need for education program regarding Cardiopulmonary resuscitation to improve the knowledge among students.

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